

Abstract

An ultrasonic flow sensor having at least one ultrasonic converter (A, B) for transmitting and receiving ultrasonic signals (A0, B0) and a receiver unit (4) that is connected to the ultrasonic converter (A, B) and determines a zero crossing (N) of the ultrasonic signal (A0, B0) as a reception time (t_0) once the ultrasonic signal (A0, B0) has exceeded a predetermined threshold value (SW). The measurement precision can be significantly improved if the receiver unit (4) determines a piece of information about an amplitude (Amp) of the ultrasonic signal (A0, B0) and varies the threshold value (SW) based on the information determined.

Fig. 4